



Design-Build Closeout Process

Roger Millar, Secretary of Transportation

Safety


- Sign-in
- Who is CPR Qualified?
- AED
- Who will call 911?
- Evacuation
- Restrooms
- Breaks



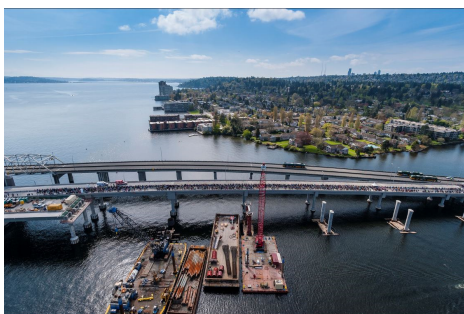

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Course Overview

- Best Practices in Closeout
- Closing out the Contract
- Quality Activities in Closeout
- Termination and Claims


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Best Practices in Closeout



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Best Practices

- Set clear expectations
- Document the progress of the project
- Verify compliance
- Plan for the audit at the beginning
- Consider phased acceptance

Plan the Work, then work the plan.

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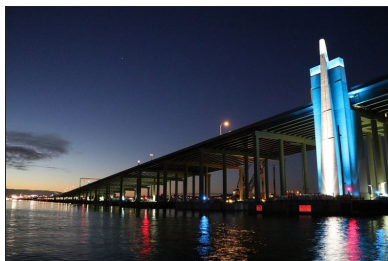
Before the Closeout Process

- Understand the contract requirements.
- Understand the risk allocation.
- Do not substitute personal preference for an objective standard.

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Closing out the Contract



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Close Out Task Force

- Oversees and provides input on Final Records
- Minimum members:
 - Project Quality Manager
 - Document Control Manager
 - Project Manager
 - Design Manager
 - WSDOT Engineer
- Meetings
 - Monthly from NTP to Substantial Completion
 - Weekly from Substantial to Final Completion

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Contract File Index (CFI)

- Essential tool
- Uniform for every project
- Administered by single person
- Basis for all document control
- Tracks:
 - Design submissions, comments, and approvals
 - Submittals
 - Communications
 - Changes



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CFI – Temp/Perm Records

Example Design-Build Contract File Index

Item	Location	File Name	File Type	File Size	File Date	File Description
1	1000	1000-001	PDF	100 KB	12/28/2017	1000-001
2	1000	1000-002	PDF	100 KB	12/28/2017	1000-002
3	1000	1000-003	PDF	100 KB	12/28/2017	1000-003
4	1000	1000-004	PDF	100 KB	12/28/2017	1000-004
5	1000	1000-005	PDF	100 KB	12/28/2017	1000-005
6	1000	1000-006	PDF	100 KB	12/28/2017	1000-006
7	1000	1000-007	PDF	100 KB	12/28/2017	1000-007
8	1000	1000-008	PDF	100 KB	12/28/2017	1000-008
9	1000	1000-009	PDF	100 KB	12/28/2017	1000-009
10	1000	1000-010	PDF	100 KB	12/28/2017	1000-010
11	1000	1000-011	PDF	100 KB	12/28/2017	1000-011
12	1000	1000-012	PDF	100 KB	12/28/2017	1000-012
13	1000	1000-013	PDF	100 KB	12/28/2017	1000-013
14	1000	1000-014	PDF	100 KB	12/28/2017	1000-014
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97	1000	1000-097	PDF	100 KB	12/28/2017	1000-097
98	1000	1000-098	PDF	100 KB	12/28/2017	1000-098
99	1000	1000-099	PDF	100 KB	12/28/2017	1000-099
100	1000	1000-100	PDF	100 KB	12/28/2017	1000-100

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Permanent Final Records

- Book 1 Final Records
- Book 2 Project Engineer's Diaries
- Book 3 Inspector Daily Reports
- Book 4 Traffic Surveillance and Contractor's Traffic Report
- Book 5 Pile Driving Records
- Book 6 Post Tensioning Records

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Permanent Final Records

- Book 7 Contaminated Materials Disposal Bills
- Book 8 Miscellaneous Records
 - As-Builts
 - Material Certifications
 - Environmental Records
 - Completed Shop Drawings
 - Optional Additional Records

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As-Built Plans and Shop Drawings

- **Definition:**
 - Record of changes made to the Released for Construction (RFC) Documents
- **Revisions Supervised by Engineer of Record**
- **Submitted in Complete Package**
- **WSDOT Review**

Temporary Final Records

- **All other project records**
- **Kept by WSDOT**
- **Maintained for three years**

Construction Final Records

(Construction) Final Records

- Similarities between DBB and DB
 - All the same criteria still apply
 - Most of the same documents are required; be familiar with your Construction Manual
- Differences
 - This is a lump sum contract – no quantities.
 - The Design-Builder assembles the materials and as-built package.
 - WSDOT performs review of the package (similar to design submittals).

Stages of Completion

- Substantial Completion
- Response by WSDOT
- Physical Completion
- Contract Completion



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Final Inspection and Acceptance

- Final Inspection
 - At Physical Completion
- Final Acceptance
 - All Contract obligations performed
 - Secretary's signature = Final Acceptance Date
 - Not an acceptance of non-conforming Work
 - WSDOT may still correct measurements or recover overpayments
 - Constitutes assignment of materials and Subcontracts

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Measurement and Payment

- Measurement
- Invoicing
- Incentives



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Measurement

- **Contract Details Requirements**
- **Specific provisions for:**
 - Batching Scales
 - Platform Scales
 - Belt Conveyor Scales
 - Scale Verification Checks

Payment Checklist

Estimate #: _____
Work Done Dates: _____
Estimated Payment Date: _____

Payment Checklist

Payment Checklist	RFI Section	✓
Design Builder		
Provide Owner/Client w/ signatures of the Design and Construction GAs	1.08.901.2	
Managers		
Program Report including narrative and technical report	1.08.901.2	
Contract Schedule update per 1.08.901.2 including user Promissory for work	1.08.901.2	
to		
match the invoice		
Certification by Design and Construction GAs Managers	1.08.901.2	
Invoice Data Sheets and Supporting Documents based on the price loaded	1.08.901.2	
Contract Schedule		
Design Exception Report	1.08.901.2	
Inventory Self-Assessment	1.08.1001.1	
Final adjustment request. Calculations and Accounting documents	1.08.901.1	
required by the schedule		
WSDOT		
GA - verify and mutually agree with D-B on physical percentage of work		
completed		
Check Schedule Against Invoice amounts incl. Paid 75% Paid this Period		
Provide		
Invoice Monthly Contract Schedule Updates	1.08.901.1	
Check to ensure Force Account sheets are signed		
Check to ensure all GAs requested are reviewed		
GA - check materials per D-B payment request		
Input into CPM and print the Estimate for GA approval		
GA approval on 75% requested to		
Complete WSDOT comments form and transmit back to Design Builder		
Review D-B that payment is approved and total amount to be paid		
Once payment is made, email all information to Document Control for		
distribution		
Signed by:		
Print name:		
Date:		

Change Orders

- **Design-Build does not eliminate change orders**
- **Design-Build Difference:**
 - Changes typically occur during design rather than construction
- **Types of Change Orders**
 - WSDOT Initiated
 - Design-Builder Initiated

Matters Not Eligible for Change Orders

- **General Provisions 1-04.4(5) lists items not eligible for change order.**

- Errors in design
- Errors in the Design-Builder's schedule
- Subcontractors
- Untimely delivery
- Delays in government approval

- **Design-Builder assumes full risk for these items.**



Final Payment

- **Based on:**

- Final estimate made by WSDOT and
- Final Contract Voucher Certification

- **Release of Design-Builder Claims**

- Unless previously filed

- **WSDOT Unilateral Final Acceptance**

- If Design-Builder refuses to sign Final Contract Voucher Certification

Retainage

- **Retainage withheld pursuant to RCW 60.28**

- **Must comply with statute**

- **Subcontractor Retainage released if**

- Work satisfactorily completed
- Documentation provided
- Lien releases on file

- **Retainage is not required for projects funded in whole or in part by federal transportation funds.**

Prime Contractor Performance Report

- **Required by WAC 468-16-150**
- **WSDOT Form 421-010**
- **Evaluates:**
 - Administration
 - Quality
 - Schedule
 - Compliance with law and contract
- **Affects Prequalification**
- **Revisions Considered for Design-Build**

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Quality Activities in Close Out



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Construction Audit Tracking System (CATS)

- **Construction Audit Tracking System ("CATS") is WSDOT's software tool for Quality Verification audits.**
 - The WSDOT Team should prepare for the audit from the beginning of the project.
- **Checklists are created from the RFP**
- **Audit Frequency**
 - 2-5 x week for first 6-9 months (or throughout for shorter projects)
 - 1-3 x week once confident in process

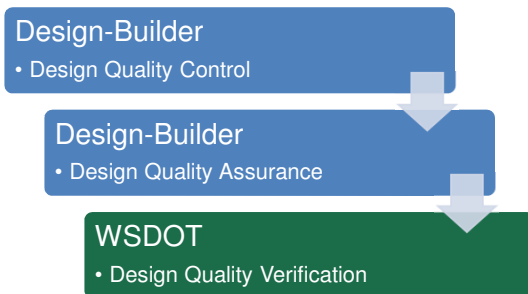
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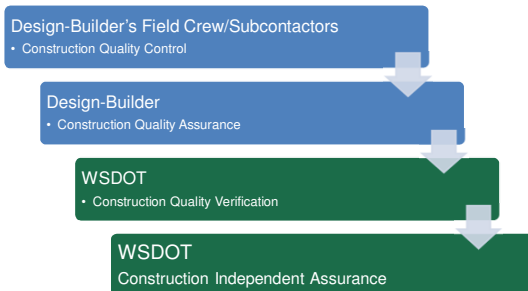
Statistical Analysis of Materials (SAM)

- **Computer Program that evaluates materials according to the WSDOT Standard Specifications**
 - Generates acceptance and verification reports
 - Can be sent electronically to WSDOT and outside entities
- **Design-Builder inputs all QA testing data**
- **Determines whether an F & t analysis is required**

Design Quality Responsibilities



Construction Quality Responsibilities



Effect of WSDOT Audits and Verifications

- WSDOT audits are an important tool to manage and monitor the performance of the contract.
- WSDOT audits and verifications do *not* transfer the risk of meeting the contract requirements.

NCR's and NCI's

- **Nonconformance Reports (NCR)**
 - Written by the Design-Builder
 - Usually product or workmanship
- **Nonconforming Issues (NCI)**
 - Written by WSDOT
 - Usually process related



Non-Conformance Remediation – Best Practice (role of EOR)

- RFP 2.28.5 "Nonconformance Report (NCR) Remediation" assigns role of evaluating the non-conformance & remediation to the EOR.
- WSDOT PE is not a middle-person between the DB EOR and DB Manager in these discussions
- Requires the DB to remediate non-conforming work to bring into contract compliance
- EOR evaluation is accompanied with a sealed signed Memo for every NCR/NCI **closeout** package by the DB.
- WSDOT Qv verifies the remediation meets contract requirement

Where is the “Finish Line”? Design-Builder’s General Warranty

- All design Work performed pursuant to the Contract
- Project free of defects
- Materials of good quality
- Work meets contract requirements
- Specifications are appropriate for project
- Project can be used as intended.

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Warranty Commences on Physical Completion

“The general Warranty commences on the day of Physical Completion.”

- General Provisions Section 1-05.6(2)
- To warrant performance standards Design-Builders must be able to manage both the design and the construction.
- Issue with termination before completion.

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Warranty Exclusions

- Wear and tear
- Failure to perform routine maintenance
- Major event (acts of God, hazardous materials, etc.)

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Termination and Claims



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Termination of the Contract

- Completion
- Default
- Public Convenience

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Claims

Process:

- Partnering
- Communication with WSDOT Engineer
- Protest Change Order
- Disputes Review Board (larger projects)
- Claim
- Alternative Dispute Resolution
- Arbitration (under \$250,000)
- Litigation (over \$250,000)

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Dispute Review Board

- **Assists with resolution of disputes**
- **Three members**
 - One selected by WSDOT
 - One selected by Contractor
 - Third selected by the first two
- **Process**
 - Dispute submitted
 - Hearing
 - Board drafts report
 - Consensus preferred
 - Dissenting member report.

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Best Practices



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Best Practices

- **Don't recreate the wheel**
 - Same processes as Design-Bid-Build
 - Difference is who responsible (roles have changed)



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Best Practices

- Suggest Document Control have a single point of contact for WSDOT and the Design-Build Team



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Best Practices

- Start early, while the design team is still on site. Once they've moved out, it's hard to get any missing documents.
- Configure the filing system so that it is as close to directly transferable to the Close Out Documentation as possible.



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Best Practices

- Team Building & Partnering
 - Mutual trust and respect
 - Leave bias at the door



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Best Practices

- Start with the end in mind
 - Document closeout as you go
 - Utilize task force meetings to full potential



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Best Practices

- As-Builts
 - The Design-Builder's designer is the Engineer of Record (Don't forget as-builts)



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Best Practices

- Punch List
 - Create together
 - Closeout together



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Best Practices

- WSDOT can mentor Design-Build on how to manage compliance efforts



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Best Practices

- Embrace the Quality Organization
 - Dispose discrepancies as you go
 - Document at Quality Task Force



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Summary

How can we be successful at closing out a Project?

- Know the requirements of the RFP (i.e. Final Records requirements either electronic or hard copy; etc.)
- Set-up for closeout at the beginning of the project (establish a CFI file structure that works for WSDOT and the DB)
- Hold Monthly Closeout task forces starting early in the Project
- Refer to Project Document Control Plan and Construction Manual for closeout plans and procedures
- Perform audits throughout the Project to ensure complete project records

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WSDOT Design-Build Training

The WSDOT Design-Build Training Courses have the following modules:

- **In Person Courses:**
 - Design-Build 101 (*Prerequisite to this course*)
 - Design-Build Startup and Request for Qualifications ("RFQ") Development
 - Design-Build Instructions to Proposers (ITP) and Request for Proposals (RFP) Development
 - Design-Build Office Management and Contract Administration
 - Design-Build Closeout Process
 - Environmental in Design-Build
 - Quality in Design-Build
- **Online Courses:**
 - Statement of Qualifications Evaluation
 - Proposal Evaluation
 - Alternative Technical Concept Review Process

Headquarters Design-Build Contacts

Art McCluskey, PE
Design-Build Program Manager
(360) 705-7468
mcclusa@wsdot.wa.gov

Jolena Missildine, Assoc. DBIA, CCM
Design-Build Engineer
(360) 709-7548
missildj@wsdot.wa.gov

Dacia Dunbar
Design-Build Assistant
(360) 705-6859
dunbard@wsdot.wa.gov

Mark Gaines, PE
Lead Construction Engineer
(360) 705-7827
gainesm@wsdot.wa.gov

Alex Countouriotis
Design-Build Liaison
(360) 705-7831
countoa@wsdot.wa.gov

Resources

- WSDOT Design-Build Web Page
<http://www.wsdot.wa.gov/Projects/delivery/designbuild/Default.htm>
- Joint Transportation Committee of Washington State Legislature Design-Build Study
<http://leg.wa.gov/JTC/Pages/Design-Build-Study.aspx>
- WSDOT Design-Build Templates
<http://sharedot.eng/cn/hqconstr/dpb/DB%20Templates/Forms/AllItems.aspx>
- Design-Build Institute of America Best Practices
<https://www.dbia.org/resource-center/Pages/Best-Practices.aspx>
- Design-Build Institute of America Transportation Conference
www.dbia.org

Questions